

# INSTALLATION AND OPERATING INSTRUCTIONS





AW770

# 

# Wireless Stereo Headphones Installation and Operation Manual Model AW770

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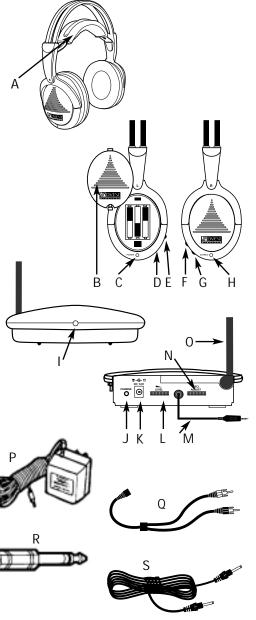
#### **INTRODUCTION**

Advent Wireless Headphones expand and enhance your enjoyment of the audio sources (TV, stereo, etc.) in your home. Like FM radio, the Advent Wireless Headphone System's 900 MHz signals travel with ease through walls, floors, ceilings and other obstacles, delivering high-quality stereo sound to virtually anywhere in or about the home. Resonator-controlled circuitry for drift- and static-free reception, coupled with outstanding range up to 300 feet\*, make the possibilities for your enjoyment of the Advent Wireless Headphone System nearly unlimited.

The Advent Wireless Headphone System is compatible with most audio sources, i.e. TVs, VCRs, stereo receivers/amps, personal stereos, boom boxes, DSS receivers, and individual stereo component pieces (CD players, cassette players, etc.). Because the headphones do not have line-of-sight restrictions imposed by infrared technology-based systems, you have the freedom to use the headphones while moving about freely within the transmitter's sending range – up to 300 feet\* in all directions. The contents of this manual cover various connection options and detailed operating procedures for making the Advent Wireless Headphone System a valued part of your lifestyle. If, after having reviewed the instructions, you have any questions, please contact our Customer Service Department at 1-800-732-6866.

\*Maximum range; results achieved may vary by environment.

- A. Self-Adjusting Headband
- B. Battery Compartment Cover
- C. Power Indicator Light
- D. Charge Input Jack
- E. Power ON/OFF Button
- F. Volume Control Wheel
- G. Tuning Control Wheel
- H. Tuning Indicator Light
- I. Audio Level Indicator Light
- J. Charge Output Jack
- K. Transmitter Power Input Jack
- L. Output Level Control Wheel
- M. Audio Input Cable
- N. Frequency Control Wheel
- O. Antenna
- P. AC Adapter
- Q. "Y" Cable Adapter
- R. Headphone Adapter Plug
- S. Charge Cable



## CONNECT THE TRANSMITTER

Connect the transmitter as follows:

## Step 1 Power the Transmitter

- 1. Insert the power cord from AC Adapter (P) into the Transmitter Power Input Jack (K).
- 2. Plug the AC Adapter (P) into any standard wall outlet

Note: There is no transmitter ON/OFF switch. The transmitter is designed to be left plugged in and powered at all times. If you will not be using the AW770 for an extended period of time, you may wish to unplug the AC Adapter.

# Step 2 Connect to an Audio Source

#### **OPTION 1 – CONNECTING TO A STEREO RECEIVER**

- 1. Connect the mini plug on the end of the Audio Input Cable (M) to the mini jack on the "Y" Cable Adapter (Q).
- 2. Connect the dual RCA plugs on the other end of the "Y" Cable Adapter (Q) to the RCA-type audio outputs of a stereo receiver/amp or other audio source.

#### **OPTION 2 – CONNECTING TO A TELEVISION**

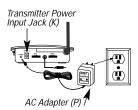
- 1. Connect the mini plug on the end of the Audio Input Cable (M) to the mini jack on the "Y" Cable Adapter (Q).
- 2. Connect the dual RCA plugs on the other end of the "Y" Cable Adapter (Q) to the RCA-type audio outputs of a TV.

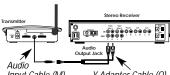
#### **OPTION 3 – CONNECTING TO A HEADPHONE JACK**

1. Plug the mini plug on the end of the Audio Input Cable (M) into the headphone jack. As needed use the Headphone Adapter Plug (R) to convert the (3.5mm) mini plug to a full-size 1/4" headphone plug.

WARNING: DO NOT connect the RCA plugs of the "Y" Cable Adapter to a speaker output on the audio source. If you use the speaker output of an audio source to connect the transmitter. you will permanently damage the transmitter. It is designed to work with RCA-type line/variable outputs or headphone outputs only.

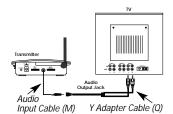
Note: For more information on hooking up and using the transmitter with various ouputs, please see MORE HELPFUL INFORMATION beginning on Page 7.

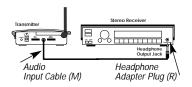




Input Cable (M)

Y Adapter Cable (Q)



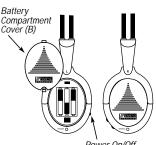


## POWER THE HEADPHONES

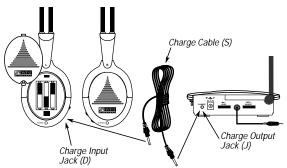
The AW770 headphones are powered by 3 AAA Nickel Cadmium (Ni-Cd) batteries.

#### Insert the Batteries

- 1. Make sure the headphone Power ON/OFF Button (E) is "OFF" or in the "out" position.
- 2. Remove Battery Compartment Cover (B) by pushing down and out at the same time on the notch at the top of the cover.
- Insert batteries following polarity ("+" and "-") as diagrammed inside battery compartment.



Power On/Off Button (E)



#### **Charging Ni-Cd Batteries**

- 1. Make sure headphone Power ON/OFF Button (E) is "OFF". Connect one end of Charge Cable (S) to Charge Input Jack (D) on the headphone.
- 2. Connect the other end of Charge Cable (S) to Charge Output Jack (J) on back of transmitter.

## **CHARGE SCHEDULE**

<u>Use</u>	Charge Time	Play Time
Initial charge	24 hours	5-6 hours
Average	10-12 hours	3-4 hours
Extended	16-18 hours	5-6 hours

Play time as shown above reflects use of batteries in good condition.

**Note:** The charger will not overcharge the batteries if left on charge longer than shown above. If you will not use the headphones for an extended period of time, it is recommended you unplug the charger cable.

For maximum battery life, it is recommended that you fully discharge the batteries about once every 30 days, followed by an Extended Use charge. To discharge the batteries, simply leave the headphones turned "ON" until the Power Indicator Light goes out.

#### About Batteries

WARNING: The AW770 built-in charger will charge Ni-Cd batteries only. DO NOT attempt to recharge alkaline or rechargeable alkaline batteries as this will damage the headphones and/or transmitter.

Over time, with repeated use, Ni-Cd batteries will eventually wear out. If, after a full charge, you notice **a)** dramatically decreased playing time, **b)** the Power Indicator Light begins to dim quickly and/or **c)** static interference occurs within a short time of turning the headphones on, it may be time to replace the batteries.

*Note:* Battery life depends on frequency of use, time, and care (fully discharging the batteries regularly, as described above.)

If you have questions regarding battery replacement, please contact our Customer Service Department at 1-800-732-6866.

#### **Using Optional Alkaline Batteries**

The AW770 headphones can also be powered by 3 AAA alkaline batteries. You may experience slightly longer play time with alkaline batteries but you will not be able to recharge them, as you can with Ni-Cds.

## ADJUST THE TRANSMITTER

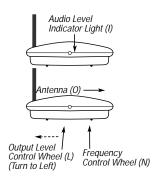
Adjust the transmitter as follows:

<u>Step 1</u> <u>Turn ON your Audio Source</u> (i.e. Stereo Receiver, TV, etc.) so that you can hear sound coming from the source.

## Step 2 Pivot the Antenna (O) to the upright, vertical position.

## Step 3 Set the Transmitter "Level"

- 1. Set the Frequency Control Wheel (N) to its midpoint.
- 2. Turn the Output Level Control Wheel (L) all the way to the left (your left when looking at the transmitter controls), as shown.
- 3. Check status of Audio Level Indicator Light (I). If it flickers intermittently (about half the time), proceed to **TUNE THE HEADPHONES**.
- 4. If Audio Level Indicator Light is on solid red or flickering *very* rapidly, turn Output Level Control Wheel slowly back to the right until light flickers intermittently.



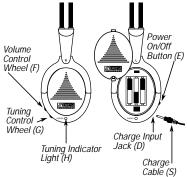
**Note:** If the light does not flicker, confirm secure connection of the AC Adapter. If the light still does not flicker, confirm secure connection to the audio source **output**. If, there is still no response, leave the Output Level Control Wheel completely to the left (as shown) and see the following **Note**.

**Note:** If the transmitter is connected to a <u>variable output</u> (i.e. headphone jack, TV audio out) on the audio source, leave the Output Level Control Wheel turned all the way to the left (as shown) **and adjust the volume on the audio source up or down as necessary to make the Audio Level Indicator Light flicker intermittently**. If you are unclear as to the kind of output (variable or fixed) you are using, please see **MORE HELPFUL INFORMATION** below.

#### TUNE THE HEADPHONES

Adjust the headphones as follows:

- 1. Disconnect the Charge Cable (S) from the headphone Charge Input Jack (D) if connected.
- 2. Use the headphone Power ON/OFF Button (E) to turn the headset "ON" (button pushed to the "in" position).
- 3. Turn the Tuning Control Wheel (G) until the Tuning Indicator Light (H) illuminates red, indicating the headset is tuned to the signal from the transmitter.
- 4. Adjust Volume (F) as desired.



*Note:* After fine tuning, interference in the form of static and/or distortion can sometimes be heard. If this occurs, confirm the transmitter/headphone adjustments and indicators. If the problem persists, refer to the **TROUBLESHOOTING** section of this manual.

## MORE HELPFUL INFORMATION

#### About Fixed-Level Outputs

A *fixed-level*, or line-level audio output is considered ideal since it provides an audio signal unchanged by adjustments to the audio source (stereo, etc.) volume control.

**Hint:** Fixed-level audio outputs from stereo receivers/amps will typically be designated as Tape, Tape 1, and Tape 2 outputs, DAT (digital audio tape) outputs, VCR audio output connections, and auxiliary audio outputs. Tape, Tape 1, Tape 2 and DAT outputs are usually marked as 'TAPE OUTPUT,' 'TAPE OUT,' 'TAPE REC,' or TAPE RECORD.' Jacks designated for phono, CD, LD, DVD or tape playback (PB) are inputs and will not work for purposes of installing the transmitter.

Fixed-level outputs from TVs are usually marked as 'Constant,' 'Fixed,' or 'Select.' If they are not marked as such, they are probably variable outputs (see "About Variable-Level Outputs," on Page 8).

Outputs from VCRs are almost always fixed.

**Hint:** When connecting to the fixed audio outputs of a VCR, remember that for the wireless system to work, the VCR must be active. In other words, turn the TV on to the channel you would normally use to watch a videotape (channel 3 or 4), turn the VCR on, then press the TV/VCR button on your VCR remote control one time to make the VCR the controlling piece of equipment. At this point, whatever channel is showing on the tuner for the VCR should be the channel playing on the TV. Change channels on the VCR. This configuration gives independent volume control through the TV (using the TV remote control) and at the headphones. This allows others in the room to listen to TV at volume levels they find comfortable, and you to listen through the headphones at volume levels you find acceptable.

**Hint:** If your VCR (or other RCA-type audio source you are connecting to) is mono (a single audio output), you need to acquire another RCA "Y" Cable. It differs from the "Y" Cable Adapter included in this kit. It will have a single male RCA plug and 2 female RCA jacks. Connect the dual RCA cables from the transmitter to the 2 female RCA jacks on the "Y" cable, then connect the single male RCA plug of the "Y" cable to the single audio output of the VCR.

#### **About Variable-Level Outputs**

A *variable-level* output, such as a headphone jack or certain RCA-type outputs, provides an audio signal to the transmitter that changes in relation to volume adjustments on the audio source. As the volume of the audio source goes up and down, so too does the audio signal strength sent to the transmitter. This can affect the quality of sound you hear at the headphones, and may require increasing or decreasing the volume level of the audio source to achieve a suitably strong audio signal for use with the AW770 system. For more information on how to use the AW770 with variable outputs, see the following section, "About Using the Headphones with a TV".

*Hint:* On most bookshelf-type or compact stereo systems, inserting a headphone plug into the headphone jack results in automatic cutoff of the stereo system speakers.

**Hint:** Most TVs, regardless of age or price, have variable outputs. If you are unsure which, if any of your outputs is fixed, refer to the TV instruction manual. Some TVs have outputs that can switch between variable and fixed. Refer to the TV instruction manual. When given a choice, fixed is always recommended.

#### About Using the Headphones with a TV

Wireless headphones are frequently used so that one person with hearing difficulty can listen to TV at a sufficiently high volume level while others in the room listen to the TV at normal volume levels.

**Hint:** If you want to use the headphones to listen to TV independent of the volume from the TV, **and** your TV has variable outputs, it is recommended you connect the transmitter to the VCR, as described in the second HINT under "About Fixed-Level Outputs." This configuration gives you a fixed-level output for independent volume control at the headphones, while others in the room can turn the TV volume up and down (even all the way down) without interfering with what you hear.

In another variation, there are those who wish to listen to TV in such a way that no sound comes from the TV speakers.

**Hint:** If you wish to use the headphones in such a way that you are the only person who can hear the audio from the TV (e.g. use them in bed while another person in the room is sleeping), connect as described in the above Hint. However, **if there is no VCR to connect to**, use the following configuration: Connect to the variable audio outputs of the TV, then turn the TV's internal speakers OFF. Most - but not all - TVs will have this capability, and will be accomplished either through the on-screen menu for the TV or using an external switch (see your TV owner's manual). Once the speakers are off, turn the TV volume up high enough to make the Audio Level Indicator Light flicker intermittently. To return the TV to normal use, simply adjust the volume back to a normal level and turn the speakers back on.

## TROUBLESHOOTING

The following troubleshooting guide takes you through some of the more common problems and corrections associated with the installation and/or operation of a wireless system. If the problem persists, please call 1-800-732-6866 and a knowledgeable Customer Service Representative will assist you.

#### Trouble Checks and Adjustments

No Sound

- Check that the AC Adapter is fully inserted into the wall outlet and the power cord from the AC Adapter is firmly connected to the Transmitter Power Input Jack.
  - Check that the headphones are turned "ON" and the red Power Indicator Light is brightly lit.
  - Check that the batteries are firmly seated following polarity as shown in the battery compartment.
  - Check that the audio source (stereo, TV, etc.) is turned on and providing sound as it normally should.
  - Check that the headphone volume is turned up.
  - If you are using a Tape 2 *Monitor* output from your receiver/amp as the audio output, check that you have pressed the Tape Monitor/Tape 2 button on the front of the receiver. This will turn on theTape 2 outputs, which may not be active.

*No Sound/* • Check that the headphone Tuning Indicator Light is illuminated red. *Distortion/* If not, adjust the Tuning Control Wheel until the light illuminates red. *Static* 

#### Trouble

#### Checks and Adjustments

No Sound/ Distortion/ Static

- Check the batteries they may be weakening.
- Confirm the batteries are "good." When batteries begin to weaken, there can be static breakup. If necessary, replace/recharge the batteries.
- Check that the antenna is in the upright position
- Check that the Transmitter Audio Level Indicator Light is flickering intermittently. If you are using a fixed output and the light is on solid or flickering very rapidly, or if the light is not on at all, adjust the Output Level Control Wheel so that the light flickers intermittently.

or

- · If you are using a variable output, make sure the Output Level Control Wheel is all the way left (as shown under ADJUST THE **TRANSMITTER**), and adjust the volume on the audio source up or down as necessary to make the light flicker intermittently.
- Change the position of the Transmitter Frequency Control Wheel to change the operating frequency. Then readjust the headphone Tuning Control Wheel until the Tuning Indicator Light illuminates red.
- Try changing the physical location of the transmitter. Locate it as high and free of obstruction as possible. Avoid placing directly on top of a TV, if possible.
- Try changing the antenna position, particularly if you think you may be near maximum transmitting range.
- Try moving the transmitter and headphones closer together. Sending the signal through certain materials, such as glass, tile, and metal, can decrease the effective transmitting distance of the system.

Sound from Check the left/right balance control on the audio source One Earpiece Only

- Try fine tuning the headset using the Tuning Control Wheel.
- Check the batteries they may be weakening.

#### **SPECIFICATIONS & FEATURES**

#### Transmitter

Omnidirectional Effective Transmitting Range: Up to 300 feet\* Adjustable Audio Level Input Variable Frequency Adjustment between 912.5 and 914.5 MHz Line Audio Input with 3.5mm Stereo Mini Plug plus 1/4" and Composite "Y" Cable Adapter UL-Listed AC Adapter

#### Headphones

Power ON/OFF Button (left headphone) Volume Control (right headphone) Frequency Fine Tuning (right headphone) Frequency Response: 20 Hz - 20 kHz Speaker Element: 40mm, Titanium-Impregnated Mylar Magnet Type: Neodymium Iron Boron Signal-To-Noise Ratio: 60 dB Channel Separation: 30 dB Distortion: < 1.5%

\*Maximum range; results achieved may vary by environment.

## WARRANTY

#### ONE YEAR LIMITED WARRANTY

Recoton Corporation (the Company) warrants to the original retail purchaser of this product that should the product or any part thereof be proven defective in material or workmanship within One Year from the date of original purchase, such defects will be replaced without charge for parts or labor. This warranty does not apply to any incidental or consequential damages.

To obtain replacement within the terms of this warranty, the product should be delivered, transportation prepaid, to the Dealer where purchased or to the Company, along with proof of date of purchase. Call 1-800-RECOTON to obtain information regarding the procedure for proper return of your product, if your Dealer does not honor the warranty. This warranty is valid in the USA and Canada only.

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#### NON-WARRANTY SERVICE

If non-warranty service is required, the product may be sent to the Company for repair/replacement, transportation prepaid, by calling 1-800-RECOTON for details, complete instructions, and service fee charges.



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